

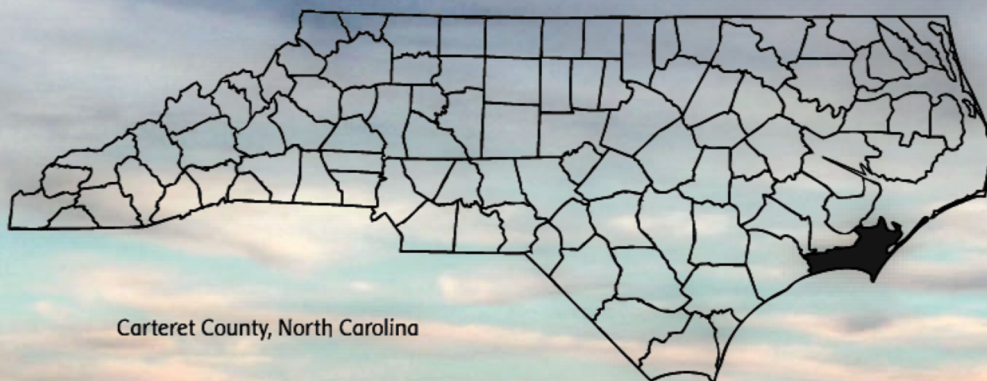
Carteret County

2017 State of the County Health Report



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Carteret County, North Carolina

Carteret County is centrally located on the North Carolina coastline and bordered on the north by the Pamlico Sound and east and south by the Atlantic Ocean. Geographically the County is defined by water and is approximately 1,064 square miles with a land area of 506 square miles. Carteret County is referred to as the “Crystal Coast.” Carteret is comprised of 10 municipalities with Beaufort being the county seat.

Major industries in the county include Tourism, Marine Trades, Marine Science, and Commercial and Recreational Fishing.

The mission of Carteret County Health Department is to promote and protect the highest standards of healthy living for all county citizens.

Review of our Priority Health Issues

The County's most recent 2016 Community Health Assessment identified the following priority issues and the following items were selected for action planning:

Behavioral health and Substance abuse

- Suicide Prevention
- Combating opioid abuse and misuse

Access to Healthcare

- Dental Summer Referrals
- Reduced Laboratory Fees
- Child Safety Initiatives

Chronic Disease Prevention

- Cardiovascular Education
- Hypertension Screening Clinics



Progress Within Last Year

Behavioral Health and Substance Abuse

- Developed a directory of Behavioral Health and Substance Abuse Treatment Providers in Carteret County and updated twice a year. The list includes the services provided, address, phone number, website, and insurances accepted.
- Provided a QPR (Question, Persuade, Refer) Gatekeeper Training for Suicide Prevention that had an attendance of 30 community agency members and key stakeholders. The gatekeeper training allows for the participants to educate the public about suicide prevention. Health Educators at the Health Department reached 139 community members with QPR sessions. The Health Department also provided a QPRT (Question, Persuade, Refer, Treat) Gatekeeper Training for Suicide Prevention that focuses on clinical treatment of patients with suicidal thoughts or actions. Participants included were physicians, nurses, and psychologists.
- Partnered with Trillium Health Resources to host a Mental Health First Aid training to 82 key community members and stakeholders. Carteret County Public Schools hosted a Youth Mental Health First Aid Training on January 26th, 2018 and 90 school staff participated.
- Partnered with the Carteret County Sheriff's Office and Morehead City Police Department to participate in prescription drop off events.
- Received funds through the Health Department from the North Carolina Injury and Violence Prevention Branch to develop a community-oriented overdose prevention program based on the Project Lazarus model. The Health Department presented opioid epidemic data and the benefits of using the NC Controlled Substances Reporting System (CSRS) through "Lunch and Learns" to prescribers in Carteret

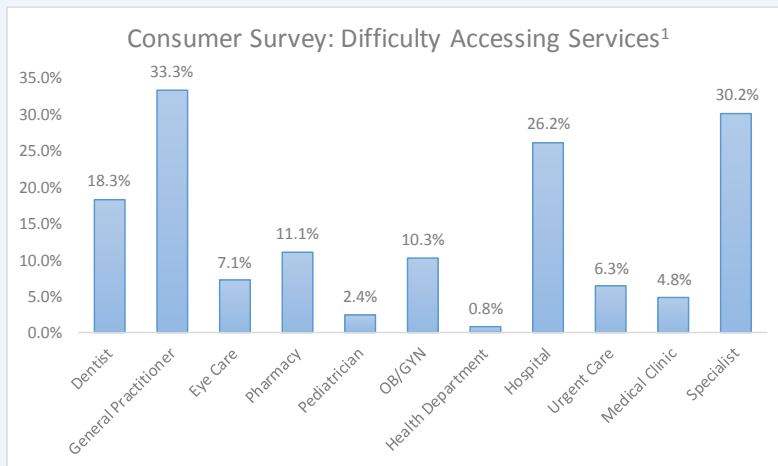
County in collaboration with the Carteret County Sheriff's Office. During this project (January 2017-April 2017), there were a total of eleven prescriber offices that received information about the opioid epidemic and information about NC CSRS. This program will continue with changes added to the presentation to accommodate the STOP Act. The Health Education team attended Coastal Coalition for Substance Abuse Prevention (CCSAP) taskforce meetings and conferences in the community focused on opioid prevention, treatment, and recovery.

- The Centers for Disease Control and Prevention's (CDC) Guidelines for Opioid Prescribing states that individuals who are taking both a benzodiazepine and an opioid are four times more likely to experience a fatal overdose. Local Medicaid billing data from Community Care Plan of Eastern Carolina can help shed light on this growing issue in Carteret County. In 2017, there were 7,606 patients with Medicaid. Of this, 1,846% had received either a prescription fill of a controlled substance (narcotic or benzodiazepines) in the last year. Of those patients, 383 (or 21%) received both a narcotic and a benzo. And among those 383, 20 (or 6%) of those patients had visited multiple (4+) pharmacies to fill prescriptions. Among those 383, 127 (or 33%) of those patients had visited 2 or more pharmacies.



Access to Care

- Established a lab contract with LabCorp for reduced laboratory fees for uninsured patients.
- Decreased the sliding fee scale from 40% to 20% for clinical patient services at the Health Department Clinic.
- Started offering Hepatitis C testing for baby boomers and IV drug users.
- Began referring pregnant patients/clients to the dental clinic.
- Received a grant from Carteret-Craven Electric Cooperative to purchase Child Safety Seats to begin a Child Safety Seat Program that allows anyone in need of a car seat to come to the health department and obtain a free one. Through the grant the health department is now a designated child safety seat checking station housed with two Child Safety Passenger Technicians (Health Educator I and Health Educator II).
- Co-located Department of Social Services employees in the Health Department to make it more convenient for patients to access services at one place.



¹Source: 2016 Carteret County Community Needs Assessment

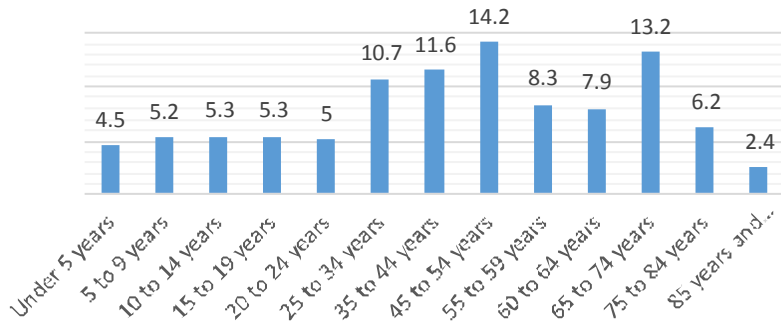


Chronic Disease Prevention

- Produced a flyer with a list of risk factors for cancer and created presentations for each risk factor that was disseminated to organizations throughout the county. Health Educators went to the organizations and presented on the material.
- The Health Department participated with the North Carolina Division of Public Health with the North Carolina Fruit and Vegetable Outlet Inventory (NC FVOI). This inventory identifies farmers' markets, produce stands and road-side stands with predictable location and hours and where fruits and vegetables are sold. This information is used to support efforts to increase the number of fresh fruit and vegetable access for the community.
- Established and maintained a community WIC garden to educate clients and their families on incorporating fresh vegetables into their diet.

Changes in Our County

Population Distribution by Age,
Carteret County 2016 ²



Carteret County's population increase has been consistent over the past decade. Growth is occurring predominately from Beaufort township to the western end of the county. The areas near Highway 24 and Highway 70 are experiencing higher growth rates due to transportation access.

2016 Population by Race and Ethnicity ²

White	60,921 (88.9%) ^A
African American	44,157 (6.1%) ^A
Hispanic	2,850 (4.2%) ^B
Asian	817 (1.2%) ^A
American Indian/Alaska Native	258 (0.4%) ^A
Native Hawaiian and Other Pacific Islander	92 (0.1%) ^B
Multi-Racial	1,587 (2.3%)

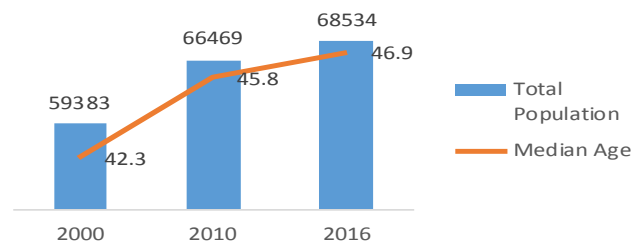
A= includes persons reporting only one

B = Hispanics may be of any race, so also are included in applicable race categories

2016 Population by Gender²

Male	33,660 (49.1%)
Female	34, 877 (50.9%)

Carteret County Population
Growth and Median Age ²



Social Determinants of Health

Determinants of Health 2016 U.S. Census	Total Population	White, Not Hispanic	African American	Hispanic
Poverty ³	13.1%	11.4%	29.3%	22.5%
Median Household Income ⁴	\$50,599	\$51,996	\$31,076	\$31,883
Unemployment ⁵	4.5%	*	*	*
Uninsured ⁶	13.7%	13.2%	14.0%	33.4%

* = Bureau of Labor Statistics (BLS) does not breakdown unemployment status by race/ethnicity.

Social determinants of health are conditions in the environment in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and overall quality

New and Emerging Issues: Hepatitis C



Rise in Hepatitis C

The Centers for Disease Control and Prevention (CDC) defines Hepatitis C as “a liver infection caused by the blood borne Hepatitis C virus (HCV).” In Carteret County, the rate of Hepatitis C has increased by 1000% from 22 cases in 2016 to 227 cases in 2017.* For 70%–85% of people who become infected with Hepatitis C, it becomes a chronic infection. Most of the cases seen in Carteret County are chronic Hepatitis C.

The two leading risk factors of Hepatitis C include persons born from 1945 through 1965 (“Baby Boomers”) and persons who have ever injected illegal drugs, including those who injected only once many years ago. Hepatitis C rates are expected to rise in Carteret County as testing and awareness increases. According to U.S. Census data (2016), Carteret County’s population is growing older; approximately 38.1% of Carteret County residents are ages 55 and over. Additionally, NC DETECT data shows a rise in the number of emergency department visits by Carteret County residents from 2016-2017.

While drugs such as opioids and heroin can be administered using different methods, injection remains a prevalent means of administration. Most people become infected with the Hepatitis C virus by sharing needles or other equipment to inject drugs.

Emergency Department Visit Reason ⁷ :	2016	2017
Opioid Overdose	64	84
Heroin Overdose	38	52
Medication or Drug Overdose	234	242

There is no vaccine for Hepatitis C, but can be prevented by avoiding behaviors that can spread the disease, especially injecting drugs. Treatment for Hepatitis C consists of oral antiviral medications. In the coming year, the Carteret County Health Department will be sending a Nurse Practitioner to be trained in Hepatitis C treatment. The treatment will be offered to uninsured and Medicaid patients. Currently, the Health Department offers Hepatitis C testing for patients with risk factors.

In 2017, testing availability increased and surveillance began persons with acute and chronic Hepatitis C.



Emerging Issue: Adverse Childhood Experiences and Health Status

Adverse childhood experiences (ACEs) are traumatic or stressful life events experienced before the age of 18. ACEs include sexual, physical and emotional abuse, as well as various forms of house dysfunction (i.e., mental illness in the household and parental divorce or separation). Epidemiological studies consistently demonstrate a relationship between ACEs and numerous health risk behaviors and health outcomes in adulthood.⁹ Health risk behaviors and health outcomes include depression, smoking, alcohol abuse, drug abuse, obesity, and heart disease. Additionally, toxic stress created by prolonged exposure to ACEs can lead to permanently and often disturbed changes in brain structure and function.¹⁰ These disruptions can have damaging effects on learning, behavior, and health as a child matures.

In 2012, a study of 10,383 adults who responded to an ACEs module on the N.C. Behavioral Risk Factor Surveillance System (BRFSS) survey, found that over half (57.6%) of respondents had experienced at least one type of ACE during childhood.¹¹ Furthermore, the study produced a statistically significant increase in the risk for current smoking, alcohol use, HIV risk behaviors, obesity, poor physical and mental health, cardiovascular disease, and depression even after controlling data for sex, age, race and education.¹¹ These findings suggest the need for evidenced-based parent skill building and child behavior strategies.

When even one parent in the home is abusing drugs or alcohol, the home is more likely to exist in a state of uncertainty or chaos. The stability and predictability that ensures a safe environment are often sacrificed to the parent's addiction. Parents who abuse substances often experience severe mood swings leaving children guessing what will occur next.¹² These events combined with foster care placement can dramatically increase the number of ACEs experiences. Drug use in Carteret County is the predominate reason for children entering foster care. Table 1 describes that of the 94 children placed in foster care from July 2016 to July 2017. Of that 94, 64.89% of children were being placed in foster care due to parental drug use.



Table 1: SY 16-17 Reasons for Entering Foster Care⁸

Reason for Entering Care **	Percent Carteret County	Percent North Carolina
Abandonment	3.19%	4.69%
Physical Abuse	7.45%	8.79%
Sexual Abuse	2.13%	3.61%
Alcohol use (child)	2.13%	0.42%
Alcohol use (parent)	18.09%	7.68%
Child's behavior	7.45%	7.54%
Coping	14.89%	22.65%
Domestic Violence	15.96%	16.11%
Drug use (child)	3.19%	1.61%
Drug use (parent)	64.89%	35.71%
Inadequate housing	20.21%	14.86%
Incarceration	18.09%	6.18%
Neglect	62.77%	83.04%
Relinquishment	2.13%	0.48%

** = Children can have multiple reasons for entering care

++ = Source: 2016 Management Assistance for Child Welfare Services in NC

The Positive Parenting Program (Triple P) is a system of interventions that offer evidence-based parenting and family support strategies designed to maximize outreach by using public health approach. Initially, Triple P implementation in NC began with support from the NC Division of Public Health to assist 36 counties. Currently Triple P Interventions are being offered free on-line to all NC citizens as well as Triple P coordination efforts to begin in Carteret County by regionalization efforts.

Increasing protective factors is an effective way to help parents be successful in promoting positive development for their child.¹³ Prevent Child Abuse North Carolina identified five categories of protective factors that include parental resilience, social connections, knowledge of parenting and child development, support systems, and nurturing children's social and emotional competence. The NC Triple P program directly supports these protective factors through evidence-based parental education to promote health child development while minimizing negative child behavior.

Mortality and Life Expectancy

Mortality and Life Expectancy¹⁴ 2012-2016 County Health Data Book		
	Carteret	North Carolina
Life Expectancy at Birth County 2014-2016 & State 2016	78.4	77.4
Fetal Death Rate per 1,000 Deliveries	*	6.9
Neonatal (<28 days-1 year) Death Rate per 1,000 Live Births	*	4.9
Infant Death Rate per 1,000 Live Births	7.3	7.2
Unadjusted Child (0-17) Death Rate per 100,000 pop	49.0	58.1
Unadjusted Death Rate per 100,000 population (2016)	1,168.50	891.9
Unintentional Poisoning Mortality Rate per 100,000 pop	24.3	13.7
*Technical Note: Rates based on small numbers (fewer than 10 deaths) are unstable & should be interpreted with caution		

Life expectancy is most often used to determine the overall health status of a community. Shifts that occur in life expectancy are used to describe trends in mortality. Life expectancy is defined as the average number of additional years a person at a given age would be expected to live if he/she were to experience throughout life the age-specific risks of death observed in a specific period of time.

Leading Causes of Death¹⁴ 2012-2016 County Health Data Book		Carteret	North Carolina
TOTAL DEATHS — ALL CAUSES		1,119.40	865
Cancer - All Sites		273.1	191.5
Diseases of the heart		254.2	179.9
Chronic lower respiratory diseases		63.9	51.1
Cerebrovascular disease		54.3	47.3
Other Unintentional injuries		48.7	33.1
Alzheimer's disease		29.2	34.0
Diabetes mellitus		26.8	26.2
Pneumonia & influenza		22.2	19.5
Nephritis, nephrotic syndrome, & nephrosis		21.3	18.2
Suicide		20.7	13.4

The overall death rate of a population reflects the average life expectancy for individuals in that particular population. The lower the death rate, the higher the life expectancy will be for that population. Rates are determined by the total number of deaths coded based on ICD-10 codes and the total resident population.

Morbidity

Between the years 2012-2016, cancer was the leading cause of death in North Carolina. Cancer incidence rate is defined by all cases of malignant cancer diagnosed and the total number of residents in that population. The Central Cancer Registry (CCR) collects and analyzes data on all cancer cases diagnosed among residents of North Carolina to determine the planning and evaluation of cancer control efforts. All healthcare providers are required to report cases to the CCR. The CCR estimates the number of new cancer cases and deaths that are expected each year in order to determine the cancer burden due to lag in data reporting times (3-4 years).

Cancer Incidence Rates 2010-2014, age adjusted to the 2000 census ¹⁴	North Carolina	Carteret
All Cancers	480.4	488.7
Colon/Rectum	37.7	41.5
Lung/Bronchus	70.0	72.0
Female Breast	158.4	147.6
Prostate	125.0	101.9

PROJECTED NEW CANCER CASES & DEATHS Projections are estimated using 2010-2014 invasive cancer incidence and 2011-2015 mortality rates and 2017 NC population estimates. ¹⁴	New Cases	Deaths	New Cases	Deaths
	Carteret	Carteret	North Carolina	North Carolina
All Cancers	551	204	59,349	20,877
Colon/Rectum	43	16	4,602	16,993
Lung/Bronchus	87	61	8,888	6,168
Female Breast	88	13	10,279	1,428
Prostate	75	11	7,577	990

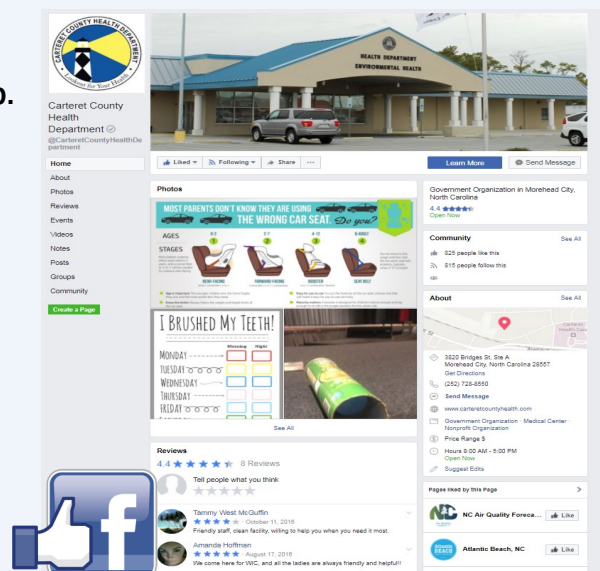
How can I get involved in Healthy Carteret?

This report can be found on our website, visit <http://carteretcountync.gov/738/Health-Department> or give us a call! We would love to present to you, your agency, or group.

To get involved in any of the Healthy Carteret Coalitions or initiatives, visit <http://carteretcountync.gov/738/Health-Department> or call (252) 728-8550 Extension 5763.

Are you on Facebook? Like our page [@CarteretCountyHealthDepartment](https://www.facebook.com/CarteretCountyHealthDepartment) on Facebook for health tips, great recipes, department highlights, and Healthy Carteret initiatives throughout the county.

For the complete community health assessment report and supporting documentation, visit <http://carteretcountync.gov/738/Health-Department>



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